

AMENDMENT TO THE CLAIMS

Please amend the claims as follows. This listing of claims will replace all prior versions and listings of claims in the application.

Claims 1-74 (Canceled)

75. (Currently amended) ~~The vector of claim 74, comprising the sequence as set forth in~~ A vector comprising a nucleic acid sequence comprising:

- a) a prokaryotic transposase gene operably linked to a first promoter, wherein the nucleic acid sequence 3' to the first promoter comprises the Kozak sequence as set forth in SEQ ID NO: 13, the Kozak sequence being positioned so as to include at least the first codon of the transposase gene, wherein the transposase gene is modified such that a plurality of the codons of the transposase gene that encode for amino acids 2-10 of a transposase protein encoded by the transposase gene are individually modified from the wild-type sequence of cytosine or guanine at the third base position of the codon to an adenine or a thymine, such that the modification does not change the amino acid encoded by the modified codon, and wherein the first promoter is a viral or a eukaryotic promoter;
- b) one or more genes of interest operably-linked to one or more additional promoters, wherein at least one of the genes of interest encodes for proinsulin or human growth hormone; and
- c) insertion sequences recognized by a transposase encoded by the modified transposase gene, wherein the transposon insertion sequences are positioned to flank the one or more genes of interest and their operably-linked promoters, wherein the vector comprises the sequence as set forth in SEQ ID NO: 31, SEQ ID NO: 32, SEQ ID NO: 41, SEQ ID NO: 42, or SEQ ID NO: 43.

Claims 76-83 (Canceled)

84. (Previously presented) A vector comprising the nucleic acid sequence as set forth in SEQ ID NO: 31, SEQ ID NO: 32, SEQ ID NO: 41, SEQ ID NO: 42, or SEQ ID NO: 43.